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BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, DC 20554 DOCKET FILE COPY ORIGINAL

In the Matter of)		
)		
Amendment of Section 73.202(b))	MM Docket No: 98-105	
Table of Allotments)	RM - 9295	
FM Broadcast Stations)	RECEIVED	
(Madison, Indiana))	HECEIVED	
То:	Chief, Allocations Branch		SEP	8 1998
	Policy & Rules Division		GEDERAL CYANNA	CATIONS COMMISSION

REPLY COMMENTS

Madison Broadcasting Company ("Petitioner"), by its counsel, hereby responds to the "Comments of WIKI, Inc." ("WIKI") in response to the Notice of Proposed Rule Making ("NPRM") 13 FCC Rcd 12600 (1998). WIKI contends that the proposed allotment of Channel 266A to Madison, Indiana would be "severely deficient" because from the proposed reference coordinates, a direct "line of sight" service could not be provided to the entire area of Madison. As Petitioner will demonstrate, WIKI relies on an incorrect assumption for its analysis and Petitioner's proposal will comply with Section 73.315(b) of the Commission's Rules. In support hereof, Petitioner states as follows:

1. WIKI cites several cases in support of its contention. First, in <u>Creswell, Oregon</u>, 3 FCC Rcd 4608, the Commission staff was concerned that in the absence of an engineering showing provided by the petitioner, a potential applicant may not be able to overcome a terrain obstruction approximately 120 meters height. In <u>Bald Knob and Clarendon</u>, <u>Arkansas</u>, 6 FCC Rcd 7435, the required site restriction placed the available transmitter site area at the outside limit of a 70 dBu

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Mass Media Bureau

signal over the community. The existence of terrain obstruction would prevent a significant portion of Bald Knob from receiving the 70 dBu signal. Finally, in <u>Jefferson City</u>, <u>Tennessee</u>, et al., the Commission staff also found a major terrain obstruction of 1700 ft AMSL which would require an antenna height of 1,261 feet, an unrealistic requirement for a Class A channel.

- 2. Here, as discussed in the attached Engineering Statement of Mullaney Engineering, Inc., WIKI's assumption of the base elevation of the ground above mean sea level is overstated by a range of 267 to 382 feet over the available site area. The Engineering exhibit provides a map showing that based on the standard prediction method, the 70 dBu signal extends up to 6 kM beyond the city limits of Madison. Furthermore, unlike the cases cited by WIKI, there are no major terrain obstructions. Rather, as the community slopes down near the Ohio River, there is a decrease in elevation which is common to many communities located on rivers.
- 3. The language of Section 73.315(b) is permissive rather than mandatory as to the provision of line of sight. See <u>Vacaville and Middletown</u>, <u>California</u>, 4 FCC Rcd 8315 (1989), recons. <u>denied</u>, 6 FCC Rcd 143 (1991) ("The presence or absence of shadowing, however, was not critical to our conclusion that an allotment to Vacaville would comply with our rules." at p. 145).
- 4. Accordingly, in view of the incorrect assumption upon which WIKI's showing is based and the absence of a major obstruction affecting direct line-of-sight over the community, the allotment of Channel 266A at Madison can be made in compliance with Section 73.315(b) and all other technical rules.

Respectfully submitted,

MADISON BROADCASTING COMPANY

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> ORIGINAL SIGNATURE

ENGINEERING EXHIBIT EE-1:

REPLY COMMENTS OF MADISON BROADCASTING COMPANY CHANNEL 266A - MADISON, INDIANA MM DOCKET 98-105

SEPTEMBER 5, 1998

ENGINEERING STATEMENT IN SUPPORT OF A

PETITION FOR RULE MAKING

TO AMEND

THE FM TABLE OF ASSIGNMENTS

MULLANEY ENGINEERING, INC.

ENGINEERING EXHIBIT EE-1:

REPLY COMMENTS OF NADISON BROADCASTING COMPANY CHANNEL 266A - MADISON, INDIANA MM DOCKET 98-105

TABLE OF CONTENTS:

- 1. Declaration of Engineer
- 2. Narrative Statement.
- 3. Figure 1, Ch. 266A Allowable Area Map.
- 4. Figure 2, Proximity to City of License.

MULLANEY ENGINEERING, INC.

DECLARATION

I, John J. Mullaney, declare and state that I am a graduate electrical engineer with a B.E.E. from Catholic University, and my qualifications are known to the Federal Communications Commission, and that I am an associate engineer in the firm of Mullaney Engineering, Inc., and that firm has been retained by Madison Broadcasting Company to prepare reply comments in MM Docket 98-105.

All facts contained herein are true of my own knowledge except where stated to be on information or belief, and as to those facts, I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.

Wohn J. Mallaney

Executed on the 5th day of September 1998.

ENGINEERING EXHIBIT EE-1:

REPLY COMMENTS OF MADISON BROADCASTING COMPANY CHANNEL 266A - MADISON, INDIANA MM DOCKET 98-105

NARRATIVE STATEMENT:

I. GENERAL:

This engineering statement has been prepared on behalf of Madison Broadcasting Company, which has requested the allotment of FM Channel 266A at Madison, Indiana. The purpose of this statement is to respond to the comments in opposition filed by WIKI, Inc. WIKI indicates that the proposed special reference point fails to provide an unobstructed line of sight to Madison, Indiana.

II. ENGINEERING DISCUSSION:

A. WIKI Opposition:

In support of its opposition, WIKI submits an engineering statement which includes three profile graphs of the intervening terrain along two radials between the special reference point for Ch. 266A (38-49-15 / 85-18-46) and the city of Madison, IN. The graphs indicate that the base elevation of the special reference point is 158 meters (518') AMSL. In addition, the graphs indicate that a 171.1m (561') tower is required to achieve an HAAT of 100m and that this height fails to provide line of sight to the Madison reference point. The additional graphs

indicate that even the use of a 304.8m (1000') tower fails to provide line of sight.

B. Flaws in WIKI Opposition:

Figure 1 is a copy of a 7.5' topographic map which illustrates the allowable area for Ch. 266A. The map clearly indicates that the elevation at the FCC reference point is 785' or 239m AMSL. In addition, it is also clearly evident that 0.6 miles east of the special reference point there is an area which has an base elevation of 900' or 274m AMSL. Thus, the WIKI terrain elevations plots incorrectly indicate the base elevation available for a potential tower by 267' to 382'. Similarly, their analysis of the requisite tower height is also incorrectly stated by 267' to 382'.

Figure 2 is a copy of a 1:250,000 map which illustrates the proximity of the special reference site to that of the city of Madison. This map also clearly shows that the theoretical 16.1 km (10 mile) Class A City Grade arc goes at least 4 km beyond the city limits of Madison. In addition, the illustrates the predicted F(50,50) 70 dBu contour of a facility operating with 6 kW at an HAAT of 100m (72 terrain radials were used to project the F(50,50)contour). The predicted 70 dBu F(50,50) contour extends up to 6 km beyond the city limits of Madison or 2 km beyond the theoretical Class A City Grade An analysis of the HAATs through the city of Madison indicate that the field strength in the area where the elevations begin to decrease is 77 dBu. This additional field strength is more than adequate to over come the minor shadowing involved here.

C. FM Transmitter Location - Section 73.315(b):

This section of the rules indicates that:

The location of the antenna should be so chosen that line-of-sight can be obtained from the antenna over the principal city or cities to be served; in no event should there be a major terrain obstruction in this path.

This rule section indicates that the location "should" provide but does not make it mandatory that within the principal every spot city line-of-sight. In fact the F(50,50) and F(50,10)curves have a built-in delta-H of 50 meters (164'). Thus the standard prediction method does not assume that 100% line-of-sight exists.

The break in line of sight illustrated by the WIKI terrain profiles is the result of the fact that the city of Madison extends all of the way to the Ohio River. While the northern boundaries of the city extend 3.4 miles north of the river the city reference point (38-44-12 / 85-22-54) is just 0.3 miles north of the river. Thus the reference point is clearly in the southern most part of the city. The elevations near the river are several hundred feet lower than the elevations throughout the main portion of the city.

For one to conclude that the decrease in terrain elevation in the south part of Madison constitute a "major terrain obstruction" would prevent most cities outside the flattest of states such as Florida from ever qualifying for a new FM or TV allotment.

As a example, no FM or TV antennas licensed to Washington, DC, have line-of-sight to every spot within Rock Creek Park. Thus using the WIKI argument no allotments should have been made to Washington, DC. Similarly, under this criteria, no allotments would be possible to the cities of Philadelphia, San Francisco and Seattle (to name just a few).

In MM Docket 88-491 regarding the upgrade & allotment of a new channel at Vacaville & Middletown, CA, the Chief of the Policy & Rules Division, Mass Media Bureau states (4 FCC Rcd 8315 (1989), pet. for recondenied, 6 FCC Rcd 143 (1991)):

"The presence or absence of shadowing, however, was not critical to our conclusion that an allotment to Vacaville would comply with our rules. While good engineering practice calls for the avoidance of shadowing by locating the transmit antenna so that it has a line-of-sight path over the principal city with no major obstructions in that path, these provisions are not mandatory."

The Vacaville decision cites a previous decision in MM Docket 84-422 (Aug 13, 1982) involving the allotment of a new channel at Freedom and Morgan Hills, CA, 2 FCC Rcd 2182 (1987) where an allotment was granted despite minor shadowing.

The Vacaville decision was subsequently referenced in 1991 in MM Docket 89-331 regarding the allotment of a new channel to Bartonsville, IL. There too an opponent attempted to raise shadowing within the city as a disqualifying issue.

Madison Broadcasting Company MM Doc 98-105 Allotment of Ch. 266A

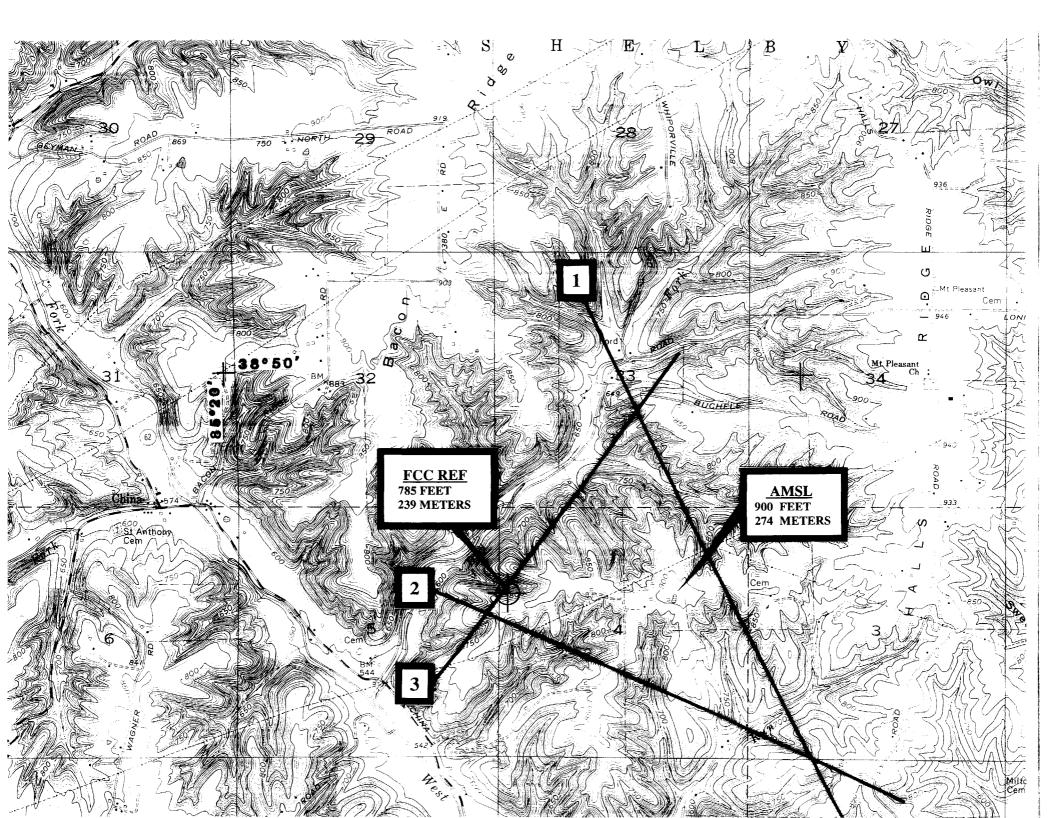
MULLANEY ENGINEERING, INC.

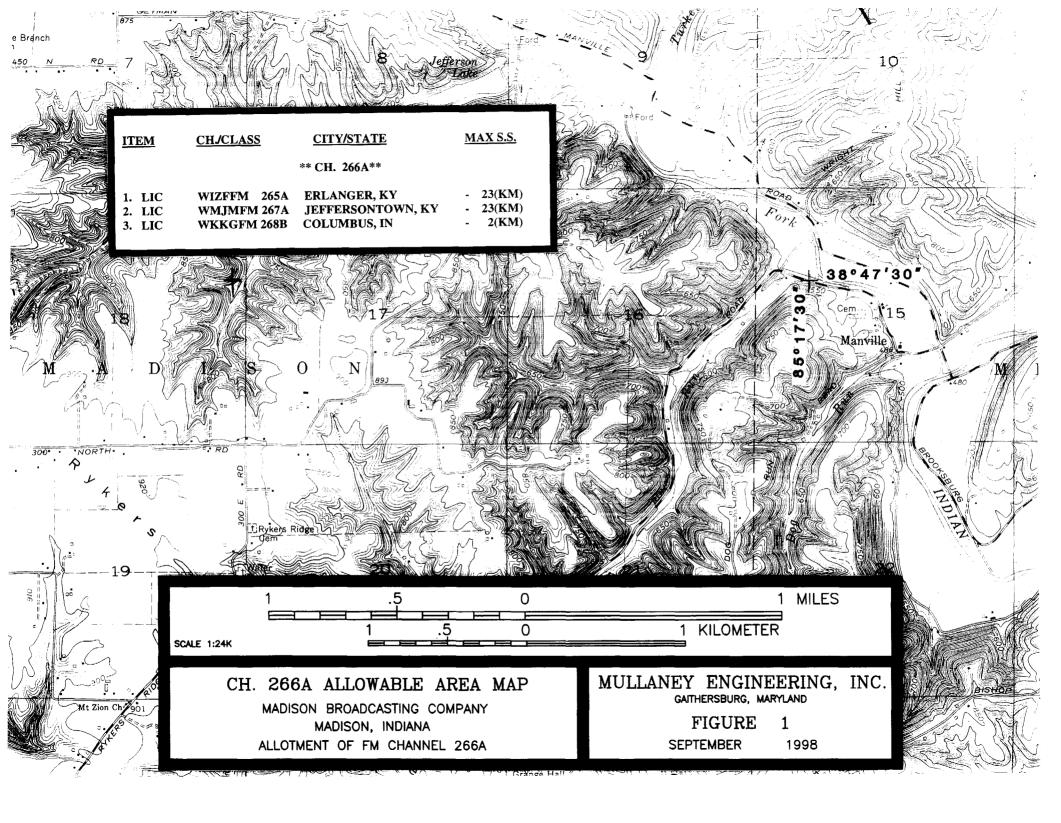
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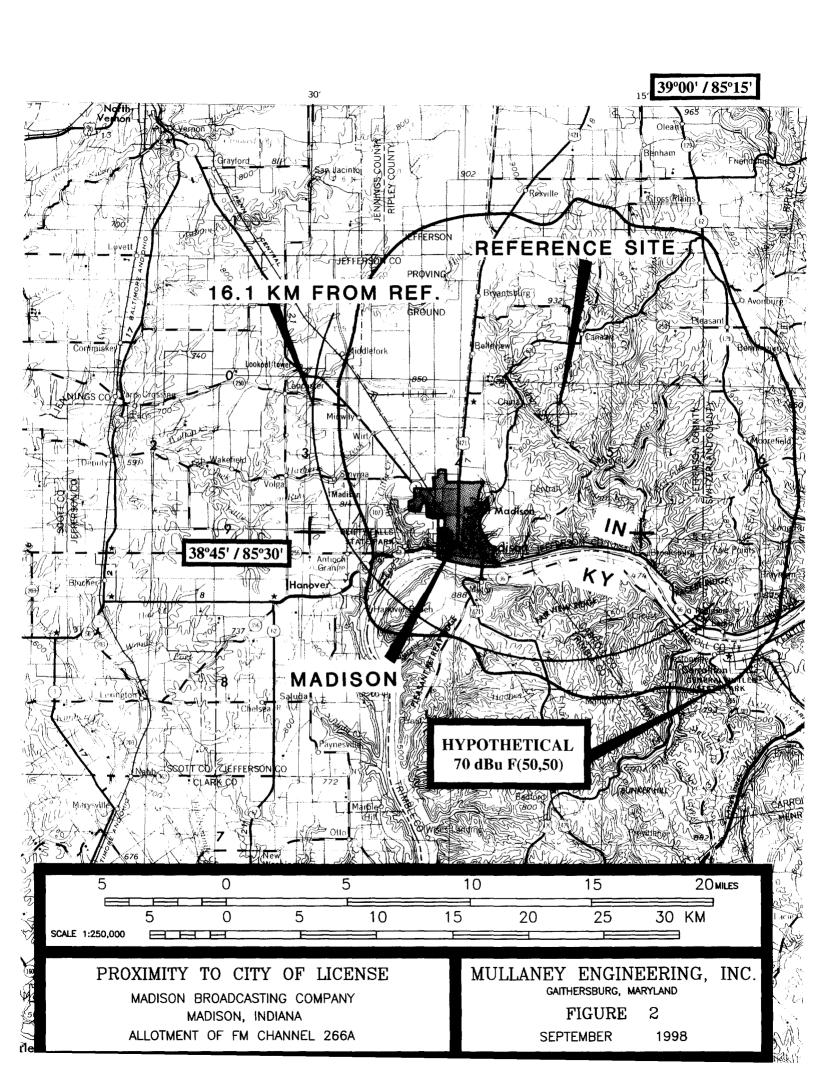
III. SUMMARY:

Madison Broadcasting Company restates its desire to have FM Channel 266A allotted to Madison, Indiana. The terrain problems within the city of Madison do not constitute a major obstruction and will not prevent an applicant from providing the required city grade service. The staff has ruled several times in previous allotments that while desirable it is not mandatory to have 100% line-of-sight to the entire principal city.

September 5, 1998.







CERTIFICATE OF SERVICE

I, Lisa M. Balzer, do hereby certify that on this 8th day of September, 1998, copies of the foregoing Reply Comments were hand delivered, to the following:

Vincent A. Pepper, Esq. Lee G. Petro, Esq. Pepper & Corazzini, L.L.P. 1776 K Street, NW Suite 200 Washington, DC 20006 (Counsel to WIKI, Inc.)

Lisa M. Balzer